FIGURE 1

1 gtcgacctgc aggtcaacgg atctgagagg agagtagctt cttgtagata acagttggat 61 tatataccat gteetgatee eetteateat eeaggagage agaggtggte accetgatag 121 cagcaageet gggggetgea gettggtggg tagaggtaet caggggtaea gatgteteea 181 aacctgtcct gctgccttag ggagcttcta ataagttgat ggatttggtt aaaattaact 241 tggctacttg gcaggactgg gtcagtgagg accaacaaaa agaagacatc agattatacc 301 ctgggggttt gtatttcttg tgtttctttc tcttctttgt actaaaatat ttacccatga 361 ctgggaaaga gcaactggag tctttgtagc attatcttag caaaaattta caaagtttgg 421 aaaacaatat tgcccatatt gtgtggtgtg tcctgtgaca ctcaggattc aagtgttggc 481 cgaagccact aaatgtgaga tgaagccatt acaaggcagt gtgcacatct gtccacccaa 541 gctggatgcc aacatttcac aaatagtgct tgcgtgacac aaatgcagtt ccaggaggcc 601 caaatgaaaa tgtttgtact gaaatttgtt aaagcttccc gacaaactag atttatcagt 661 aaggattgtt tictgcaagg gggatgaaac ttgiggggtg agccatttgg gctgaggagg 721 agggaggttg gagctgagaa atgtggagac aatttccctt tagaaggact gaatctccct 781 geetetetgg ggtgeggeag ceageaggat ceaatggtgt atatgtetee ceageteece 841 atteagtgat ateatgteag tagettgaaa ttateegtgg tgggagtatt atgteatgga 901 aattggcaaa tggaaacttt tattggagat tcaattgtta aacttttacc agcacaacac 961 tgccctgcct tcagagtcaa tgaccctatc caagtttaat ccatctgtcc actgtctcca 1021 acacgatett tataaaacae acetgacaae attaccettt tatteagttt tttaaaagat 1081 aagtttccag ctcatcgggg tggctttaaa ggccatttct cctctggacc tcacccaact 1141 tttcaaatca cttttcctac ccctacctct aaatgctact caaactccag ccatcctgaa 1201 taataagact tttgaaaagt agattatggg ctgggcacag tggctcacac ctgtaatccc 1261 agcaetttgg gaggecaaga tgggtggate acctgaggte gggagttega gaccageetg 1321 actaacatag tgaaaccetg tetetactaa aaatacaaaa ttagttgggg gtggtggcac 1381 aagcetgtaa teecagetae teaggaggtt gaggeagggg aattgettga aeetgggagg 1441 cggaggttgc ggtgagccta gattgctcca ctgcactcca gcctgggcaa caagagcgaa 1501 actocatoto aaaaaaataa ataaataaat aaagtagatt acatoagata cototggoot 1561 aggttgttta tgaccaactc teetgetgag aataactaga aaagetagae aaaacatatt 1621 tecaaaagat etetttggag geateagaga atggeeaagg etgtaaggaa etgeetgage 1681 ccagagaggt ggagcccagc actggtgccc tttactcctg gggacatgtg ctggtttcaa 1741 aaacttcagc tgagcttttg agcattcatg gaacttggtg ggggagatga aatttgtacc 1801 ttaaatcctg cetacaggga gggtccctga taatccccac ccaatttgga aatctgggtc 1861 agecttcaca ggtactgaag cectectetg aatgatetea agteetgeta gggtagaggt 1921 tacctgcttt tgaaaggete etggeetace tgtgeageag gageaaaagt gaaceatete 1981 agggtacaga taacaatcat ccagagcctt gaatgacctc tactgtgctt aatatatagt 2041 attcagcagt cagtaaaaag gatttaggca catgcaagat gacctgtgta tcagggagaa 2101 ataggcaata aattgagatc cagcagggat ttgaatcatg gatttgaatc aggggcagcc 2161 ttcgaaagaa ctatggagaa tatactcaga tttaaaacat aagattggaa tttttggcag 2221 agaactaaca actgtacaaa aaaggaacca aatggaaatc ctagaactga aagatgcaat 2281 taaccgatgt tgagaaatag ccaacatcta ttgaacactt cccatgtgga cagctgtgct 2341 aaacacttta caggcatcaa cataagatgt gtccccttac agcagtgcag tgtccctcct 2401 aagacatgga cagcctggtt teeetatete tetgetteat caaaaceeet ttacgtgggg 2461 cttagacact cctgttgtct ctagtgtcta gtagcacagg gctcagcaca tggaagccac 2521 tagatacaat ttgatgacca ggacctccga tgaaagccat gggtgctgat tgggaaggca 2581 ttgtctttta tgtgctatgg tcttaaagct tcatccagga agcagaactc ggggggtgct 2641 gaggacccag aaccgagaat aagattagtc agagatttcc tgtgggcaga aatcataagg 2701 acgccaactg tttgggtgag ataagacgaa accaagagtg gacttgtggc cagaagcgtg 2761 aggaagaggg agagagette cettgteece tttetteete teectaagee acagtgattg 2821 acagececce egetttggag teagageagg ettgagaetg gaetgggaaa ggagggtggg 2881 tcaggataca gagcaggaag gctgggagtg cagggcagga gcaaggggct ggggcattca 2941 ttgtgcctga tctctcccac tttacctggg gtaaagaagc atatgcaaaa gccacggtgt 3001 gagtatttcc caagtgccag ggtcagggca tgattcatca cgtgcagcat ttcattcaat 3061 ccttatagta accgatgatg tggcttctat tattagctct atcagataat gaaactgaga 3121 ccaagacagg ctctgcacat tgtgtggggt aatgacacag ggggattcag acctagactc 3181 cataactcct gccccaggga ccacccccac cctcaccctg tgcatgtcga caaaggacag 3241 actgggccac ttctcaggac acagcgggga aatgacacag agcagggagg ttccaggagc 3301 cccgagcgtc ttttctccag gagaatactc tctgaattca gactggggtc agagaaacat 3361 ttacccagga gccgcagtgt gggtggggct ttttacttga aacgctgtct gaaggcagtg 3421 gcaggatgaa etetecacee taeettggea agecaettet ettetgeaat etgtaaggae

FIGURE 1 (continued)

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3481 attgttgaga gaattatggt cttccaattc cggagggttg aagaaagaca aataggagag
3541 aacctateat agteaggtge tagetgeett etettteaga gagtgtgaga ataaagtgat
3601 acacttgatt attagcaaat actttggaaa ttttaaacgc taatattcaa cacactctgg
3661 aagaggcaaa taagtagaca ggttcatata catcatctcc ttcagctagt cctcacaaaa
3721 acaaacaaat gaataaacaa aattottott tggocotcat aggaagacac tgtttottga
3781 acgtgtttca aaaaggatgg gtgactcact caaggtcaca ctgtttatga ggacagtaca
3841 ggaatacaga catgccattt tgcctgaaaa aatccatcac ccagggaggt gacacaattt
3901 tgcagaaatg ttctatttcc tctgaaggat acattcttta aacctttggg aaattcattc
3961 atagtettee teetttgaag gattactete tggacacaaa gtgtttgatt etgatttgtt
4021 ggttggaaga tgtgttggtt gagagaaaga ttctgatttg ttggttgaaa atagactcat
4081 caagatcaac tgctgtagta gtaaatattt tgacattttg tctgtattcc tgtgctgccc
4141 tcacaagctg catcaccttg agtgagtcat tcatactttt ttgtttgttt ttgttttgga
4201 gatggagtet tactetgttg cetaggetgg agtgeggtgg egtgatettg geteaetgeg
4261 acctocatet cotgggttca agtgatocto otgoctoago otoccgagta gotgggatta
4321 caggcacatg ccaccatccc tgctaatttt tgcattttca gtagagacgg agtttcacca
4381 tgttggtcag gttggtcttg aactcctgac ctcaggtgat ccgcccacct cagcctcccc
4441 aagtgctggg attacaggtg tgagccaccg tgcccagccc agccatcatt tttgaaacac
4501 gtttgagaaa tagtgtcttc ctttgagggc caaggagaca ttttttttgt ttatttgttt
4561 gtttttgtga ggactagctg aagggggtga tgtatattaa cctgcctact tatttgcctc
4621 ttcccagagt gtgatgaata ttagggttta aagtttctga agcatttgtt aataaagccc
4681 ggggctggag gtcagaagac ctggatttct ctgcatactt ttgccatcag caagctgtgt
4741 gaccttggac agatcccttt tttgtctaaa tctttctgag tcttcttgaa aacaatgcca
4801 ggttgggaca ggatgattgc caagctcccg tccagctcta aaacactgca acgtatgctt
4861 ctgcaccage actgtccate ctgtagatca tgcagaaatt ctcttcaact ttttcctacc
4921 cataaaatag gagcatgctt acctttttcc taatgttcca ggccccgggt ctagatattg
4981 taagtaagga agttaatgtg tatcagagcc cattatgggc cagaagttct cctcttcctt
5101 tgaagaagac atgatcaccc tcattctgag agtgaagaga cagaggctca actaatgaaa
5161 tgatttgttc aaggtcacac gggtggcaca aggcaagtgg cagaggttga atttagaccc
5221 attectgtce aaatgetgag tttatgteat egteeegaga eeataaettt aaagatgtaa
5281 gatagtggga aaagagttga tttcaaagca cctctcagaa ggactcactt tacatcaggg
5341 gtcagcagac tcaggccaaa tccggtccat tccccgcttt tgcaaagaaa gttgtagtgg
5401 aacacagcta ggcttattga tttatggatt gccaacgtcc ttttgtgaaa cagacagctg
5461 agctgagtaa tcgtggcgca caaaacctaa aatatttact atctcgtcct ttacagaatg
5521 tttgccaatc tatggtccgg agtccaaggc tgtccatttt tcaaagaaca caaagtgaca
5581 tgagactgtc ccatgtgcag ggagccctat cattttatta tgaaaaaacg gcctttctgc
5641 tcaaatctgt tttttaaaaa gtcaacaaac agactctggg tacctgtcag gaacagtagg
5701 gagtttggtt tccattgtgc tcttcttccc aggaactcaa tgaaggggaa atagaaatct
5761 taattttggg gaaattgcac aggggaaaaa ggggagggaa tcagttacaa cactccattg
5821 cgacacttag tggggttgaa agtgacaaca gcaagggttt ctctttttgg aaatgcgagg
5881 agggtatttc cgcttctcgc agtggggag ggtggcagac gcctagcttg ggtgagtgac
5941 tatttettta taaaccacaa etetgggeee geaatggeag teeactgett getgeagtea
6001 cagaatggaa atctgcagag gcctccgcag tcacctaatc actctcctcc tcttcctgtt
6061 ccattcagag acgatctgcc gaccctctgg gagaaaatcc agcaagatgc aagccttcag
6121 gtaaggctac cccaaggagg agaaggtgag ggtggatcag ctggagactg gaaacatatc
6181 acagetgeea gggetgeeag geeagaggge etgagaactg ggtttggget ggagaggatg
6241 tccattattc aagaaagagg ctgttacatg catgggcttc aggacttgtg tttcaaaata
6301 teccagatgt ggatagtgcg accggaggge tgtettaett teccagagae teaggaaece
6361 agtgagtaat agatgcatgc caaggagtgg gactgcgatt caggcctagt tgaatgtgct
6421 gacagagaag cagagaggg caccaggggc acagcccgaa ggcccagact gatatgggca
6481 aggectgtct gtgctgacat gtcggagggt cccactctcc agggaccttg gtttccccgt
6541 ctgtgacatc tgtgacatga gagtcacgat aactccttgt gtgccttaca gggttgttgt
6601 gaaaattaaa tgcacagata atagcgtaac agtattccgt gcattgtaaa gagcctgaaa
6661 accattatga titgaaaatg gaatcggctt tgtgagacca tcactattgt aaagatgtga
6721 tgctgataga aatgacagga ctgcttgtgc atgccctctg cagtgtgaca ttccagcagt
6781 gaaatcatgt tggggtgact tctcccccac tctgaccttt atgtttgtct gggccgaggc
6841 tgcaagtcgg gctctgtggg tgtatgagtg acaagtctct cccttccaga tatggggact
6901 gtetgettee etaggttgee tetecetget etgateaget agaageteea ggagateete
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FIGURE 1 (continued)

6961 ctggaggccc cagcaggtga tgtttatccc tccagactga ggctaaatct agaaactagg 7021 ataatcacaa acaggeeaat getgeeatat geaaageaet ttggtttgee tggeeaeeee 7081 tegtegagea tgtgggetet teagageace tgatgaggtg ggtacagtta gecacaette 7141 acaggtgaag aggtgaggca caggtcccag gtcaggctgg ccggagctct gtttattacg 7201 totcacaget ttgagteetg eteteaacea gagaggeeet ttaccaagaa gaaaggattg 7261 ggacccagaa tcaggtcact ggctgaggta gagaggaagc cgggttgttc ccaagggtag 7321 etgeteetge aggaetetga geaggteace agetaatgga ggaaaggete tagggaaaga 7381 cccttctggt ctcagactca gagcgagtta gctgcaaggt gttccgtctc ttgaaacttc 7441 tacctaggtg ctatggtage cactagtete aggtggetat ttaaatttat acttaaatga 7501 atgaaaatag aagaaaattt aaaatccaga cccttggtca cactatccac atttaaagag 7561 gtcaatagec acatgtggtt agtggccacc ctattgggca gtgcagctac agaacatttt 7621 tgcatcccag aaagttcttt tggatgttgc tgctctacag catgctttgc tgaaacagaa 7681 gtgccttccc tgggaatctc agatgggaag caagtaagga ggggagtcaa atgtgggctc 7741 actgeteace agergtgagg gtrgggeetg cerettaace attgteagee teagterret 7801 catccatgca tgccgtgggt atactaaaat actatacccc tggaagagct ggatgcaaat 7861 ttgacaagtt ctgggggaca caggaaggtg ccaagcacaa ggctgggcac atggtggctg 7921 tgcactacag ctgagtcctt ttccttttca gaatctggga tgttaaccag aagaccttct 7981 atctgaggaa caaccaacta gttgctggat acttgcaagg accaaatgtc aatttagaag 8041 gtgagtggtt gccaggaaag ccaatgtatc tgggcatcac gtcactttgc ccgtctgtct 8101 gcagcagcat ggcctgcctg cacaaaccct aggtgcaatg tcctaatcct tgttgggtct 8161 ttgtattcaa gtttgaaget gggagggeet ggetaetgaa gggcacatat gagggtagee 8221 tgaagaggt gtggagaggt agagtctagg tcagaggtca gtgcctatag gcaagtggtc 8281 ccagggccac agctgggaag ggcaaatacc agaaggcaag gttgaccatt cccttcctca 8341 agtgcctatt aaggctccat gttcctatgt tgttcaaacc ctaactcaat cccaaattaa 8401 tccaccatgt ataaggttga gctatgtctc ttattcctgg acaccatact cagccatatc 8461 tggtccacac attaacagct ggatgacctt gaagaagctt cacccactct gttcctcagc 8521 tttcccttca gtgggatgat atcaactgga caacaggatg tgcgattctt ttagttccag 8581 ccttccagga tgttttcact cccctgtttg ttgttgtagg atggtattac ctccaccttc 8641 ccaccttccc tatgccctgg ttctgtctcc tgtgcctcgc tctgaaagtg gatgagacct 8701 acaatteetg teetggtagt teteetaatg aacacactga ageaegagga agetgagatt 8761 tttgttgcta catgagagca tggaggcctc ttagggagag aggaggttca gagactccta 8821 ggctcctggt ggagccccac tcatggcctt gttcattttc cctgcccctc agcaacactc 8881 ctattgacct ggagcacagg tatcctgggg aaagtgaggg aaatatggac atcacatgga 8941 acaacatcca ggagactcag gcctctagga gtaactgggt agtgtgcatc ctggggaaaq 9001 tgagggaaat atggacatca catggaacaa catccaggag actcaggcct ctaggagtaa 9061 ctgggtagtg tgcatcctgg ggaaagtgag ggaaatatgg acatcacatg gaacaacatc 9121 caggagactc aggcctctag gagtaactgg gtagtgtgca tcctggggaa agtgagggaa 9181 atatggacat cacatggaac aacatccagg agactcaggc ctctaggagt aactgggtag 9241 tgtgcttggt ttaatcttct atttacctgc agaccaggaa gatgagacct ctctgccctt 9301 ctgacctcgg gattttagtt ttgtggggac caggggagat agaaaaatac ccggggtctc 9361 ttcattattg ctgcttcctc ttctattaac ctgaccctcc cctctgttct tccccagaaa 9421 agatagatgt ggtacccatt gagcctcatg ctctgttctt gggaatccat ggagggaaga 9481 tgtgcctgtc ctgtgtcaag tctggtgatg agaccagact ccagctggag gtaaaaacat 9541 gctttggatc tcaaatcacc ccaaaaccca gtggcttgaa acaaccaaaa ttttttctta 9601 tgattctgtg ggttgaccag gattagctgg gtagttctgt tccatgtggt ggaacatgct 9661 ggggtcactt tggaagctgc attcagcaga gtgccaggct tgcgctgggc atccaaggtg 9721 gtccctcatc ctccaggctc tctttccatg tgatctctca gtgtttaaga gttagttgga 9781 getteettae ageatggegg etgaetteea aaagggatta tteeaaaaag ageeteaaca 9841 tgcaggcgct tattatgact tctgcttgca tcatcctatt ggccaaagcc agtcacgtgg 9901 ctaagtctag cccctgtga gaggagactg cataagagtg tgaacaccag gagacacggt 9961 cactgggggc caccactgta accatctacc acaggacctg aatctctgtg tgctactccc 10021 ttgctcaagg gccccctac ccacgcagac ctgctgtctt ctagcaaagc ccatcctcag 10081 gacctttete ttecaateet tattgactea aattgattag ttggtgetee acccagagee 10141 ctgtgctcct ttatctcatg taatgttaat gggtttccca gccctgggaa aacatggctt 10201 tgtctcaggg gcttgctgga tgcaacctta acctcaatgt gagtggccat actgtggcac 10261 tgtcccatcc ctcaccaggg acactgttct ggagggtgac tgcctgttct gtgaggagtg 10321 gggatggeta ggacattgca tggaacacac caccaccca tettetcaga getcaaacce 10381 tgacagaaca ccagctccac aggccttggc ttctgctgat ggtgccgtgt atttaccaga

FIGURE 1 (continued)

10444						
10441	cttagtggtc	caaggccaga	gtggcagatt	tcccaaagtc	aaggtgtgac	agtgggacag
10201	cctctttgtg	tctttgctgt	cctaagaaac	ctgggccagg	ccaggcgcag	tageteacae
10201	cttgtaatcc	cagcactttg	agaggccaag	gtgggcagat	cacgaggtca	ggagtttgag
10021	accagcctgg	ccaacattgg	tgaaaccctg	tctctattaa	aaatagaaaa	cattagacag
10081	gtgtggtggt	gcatgcctgt	aatcccagct	actcaggagg	ctgaggcagg	agaatcgctt
10/41	gaacccagga	ggtggaggtt	gcagtgagcc	gagattgtgc	cactgcactc	cagectagge
10801	gacagagcaa	gactccgtct	cgggaaaatt	aattaataaa	taaataaacc	taggtoccag
10891	agtcccacag	aatggcagac	aggagcacct	gggggctttt	agggtatggc	atttcccctd
10921	tactaactct	gggctgtcca	gaggcgattt	catggcgtgg	agtggagagg	gaggcagcac
10981	aggacttcct	aggcctcagc	tctcacctgc	ccatcttttq	atttccaggc	agttaacato
11041	actgacctga	gcgagaacag	aaagcaggac	aagcgcttcg	ccttcatcca	ctcagacagt
11101	ggccccacca	ccagttttga	gtctgccgcc	tgccccggtt	gatteeteta	cacagogata
11161	gaagetgaee	agcccgtcag	cctcaccaat	atgeetgaeg	aaggcgtcat	datcaccasa
*	tictacticc	aggaggacga	gtagtactgc	ccaggcctgc	cidttcccat	tottacataa
11281	caaggactgc	agggactgcc	agtccccctg	ccccagggct	cccggctatg	adadcactaa
11341	ggaccagcca	ttgaggggtg	gaccctcaga	aggcgtcaca	acaacctggt	cacaggacto
11401	tgcctcctct	tcaactgacc	agcctccatg	ctgcctccag	aatggtcttt	ctaatgtgtg
11461	aatcagagca	cagcagcccc	tgcacaaagc	ccttccatgt	cgcctctgca	ttcaggatca
11521	aaccccgacc	acctgcccaa	cctgctctcc	tcttgccact	acctetteet	ccctcattcc
11581	accttcccat	gccctggatc	catcaggcca	cttgatgacc	cccaaccaag	tggctcccac
11641	accctgtttt	acaaaaaaga	aaagaccagt	ccatgaggga	gatttttaaa	gatttataga
11/01	aaatgaaaat	taggatttca	tgatttttt	ttttcagtcc	ccgtgaagga	gagcccttca
11/61	tttggagatt	atgttctttc	ggggagaggc	tgaggactta	aaatattcct	gcatttgtga
11821	aatgatggtg	aaagtaagtg	gtagcttttc	ccttcttttt	cttctttttt	tgtgatgtcc
11881	caacttgtaa	aaattaaaag	ttatggtact	atgttagccc	cataattttt	tttttccttt
11941	taaaacactt	ccataatctg	gactcctctg	tccaggcact	gctgcccagc	ctccaagctc
12001	catctccact	ccagattttt	tacagctgcc	tgcagtactt	tacctcctat	cagaagtttc
12061	tcagctccca	aggetetgag	caaatgtggc	tcctgggggt	tetttettee	tctgctgaag
12121	gaataaattg	ctccttgaca	ttgtagagct	tctggcactt	ggagacttgt	atgaaagatg
12181	gctgtgcctc	tgcctgtctc	cccaccaggc	tgggagctct	gcagagcagg	aaacatgact
12241	cgtatatgtc	teaggteect	gcagggccaa	gcacctagcc	tegetettgg	caggtactca
12301	gcgaatgaat	gctgtatatg	ttgggtgcaa	agttccctac	ttcctgtgac	ttcagctctg
12301	ttttacaata	aaatcttgaa	aatgcctata	ttgttgacta	tgtccttggc	cttgacaggc
12421	tttgggtata	gagtgctgag	gaaactgaaa	gaccaatgtg	tyttycttac	cccagaggct
12401	ggcgcctggc	ctcttctctg	agagttcttt	tcttccttca	gcctcactct	ccctggataa
T 7 7 4 T	catgagagca	aatctctctg	cgggg			

FIGURE 2

- 1 meicrglrsh litllflfh seticrpsgr ksskmqafri wdvnqktfyl rnnqlvagyl 61 qgpnvnleek idvvpiepha lflgihggkm clscvksgde trlqleavni tdlsenrkqd 121 krfafirsds gpttsfesaa cpgwflctam eadqpvsltn mpdegvmvtk fyfqede